

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the matter of:

Development of Nationwide
Broadband Data to Evaluate
Reasonable and Timely
Deployment of Advanced Services
to All Americans, Improvement of
Wireless Broadband
Subscribership Data, and
Development of Data on
Interconnected Voice over Internet
Protocol (VoIP) Subscribership

WC Docket No. 07-38

**COMMENTS OF THE CALIFORNIA PUBLIC UTILITIES
COMMISSION AND OF THE PEOPLE OF THE STATE OF
CALIFORNIA ON THE DEVELOPMENT OF BROADBAND DATA**

I. INTRODUCTION

The California Public Utilities Commission and the People of the State of California (California or CPUC) submit these Comments to the Federal Communications Commission (FCC or Commission) in response to the Notice

of Proposed Rulemaking (NPRM) seeking comment on how the FCC should collect broadband data to successfully carry out its broadband policies.¹

California supports the past and ongoing efforts of the FCC to improve its collection of broadband data through Form 477 and other vehicles.² The CPUC itself relies heavily on the provider responses to Form 477 to publish its annual broadband status reports and telephone penetration reports required under California law.³

Recently Governor Schwarzenegger signed Executive Order S-23-06, declaring as a priority in California the promotion of “widespread access to, and adoption of,...new applications for broadband networks and advanced communication services.”⁴ In particular, Executive Order S-23-06 creates the California Broadband Task Force, a group of public and private stakeholders tasked with developing a comprehensive report to the Governor and the

¹ *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscriberhip Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscriberhip*, WC Docket No. 07-38, *Notice of Proposed Rulemaking*, FCC 07-17 (rel. April 16, 2007) (*NPRM*).

² Twice a year, U.S. broadband service providers report subscription and other data through the FCC’s Form 477. FCC, Form 477 Reporting Requirements & Deployment Data (updated Dec. 11, 2006), <<http://ftp.fcc.gov/broadband/data.html>>.

³ California Public Utilities (Cal. PU) Code Section 873 requires an annual report on telephone penetration, and PU Code Section 709.3 requires an annual report on broadband.

⁴ State of California Office of the Governor. Executive Order S-23-06 by the Governor of the State of California. “Twenty-First Century Government: Expanding Broadband Access and Usage in California (Revised).” <http://gov.ca.gov/index.php?/executive-order/4585/>.

Legislature regarding ways to eliminate barriers to broadband access and usage.⁵ The CPUC is participating on the Task Force and assisting it in identifying un-served and underserved areas in California.⁶

In the past, the CPUC has had difficulty collecting comprehensive data directly from broadband service providers due to jurisdictional limits. The FCC has jurisdiction over broadband providers⁷ and plays a valuable role in ensuring that, on a nationwide basis, granular data about key aspects of broadband services are consistently developed, collected, and maintained. The FCC should use their jurisdictional authority to develop detailed information about *current* subscribership and broadband availability for

⁵ *Id.* (Item 1 states, “The State shall create a California Broadband Task Force. This Task Force will bring together public and private stakeholders to remove barriers to broadband access, identify opportunities for increased broadband adoption, and enable the creation and deployment of new advanced communication technologies.”).

⁶ *Id.* (“IT IS FURTHER ORDERED that State Agencies shall cooperate in the implementation of this Order. Other entities of State government not under my direct executive authority, including the CPUC, the University of California, the California State University, California Community Colleges, constitutional officers, and legislative and judicial branches are requested to assist in its implementation.”).

⁷ *See Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, GN Docket No. 00-185, CS Docket No. 02-52, Declaratory Ruling And Notice Of Proposed Rulemaking, FCC 02-77 (designating cable modem as an information service); *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, WT Docket No. 07-53, Declaratory Ruling, FCC 07-30 (designating wireless broadband as an information service); *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, CC Docket Nos. 02-33, 01-337, 95-20, and 98-10, *Report And Order And Notice Of Proposed Rulemaking*, FCC 05-150 (designating wireline broadband as an information service), and; *United Power Line Council’s Petition for Declaratory Ruling Regarding the Classification of Broadband over Power Line Internet Access Service as an Information Service*, WC Docket No. 06-10, *Memorandum Opinion And Order*, FCC 06-165 (designating Broadband over Power Line (BPL)-enabled Internet access as an information service).

every state and territory. California believes that the more granular the data collected and shared by the FCC, the more targeted and effective state and federal policymakers can be in developing broadband initiatives. California provides recommendations herein for modifying Form 477 with the goal of balancing the value of the modifications to policy makers, and the burden of compliance for broadband providers.

II. DISCUSSION

In the *NPRM*, the FCC identifies what California considers to be key problems of Form 477 in its current form. For example, as the FCC states, it “currently require[s] wireline broadband service providers filing Form 477 to list those Zip Codes where they have at least one broadband subscriber.”⁸

The FCC has implemented incremental improvements in Form 477, such as requiring companies to report “technology-specific Zip Code lists.”⁹

Nevertheless, California agrees with the FCC’s conclusion that:

... notwithstanding the value of data currently submitted on the Form 477, there is more precise information that we could gather to give us a more accurate picture of current broadband deployment. Ideally, we would have information about the choices

⁸ *NPRM* at para. 10 (footnote omitted).

⁹ *NPRM* at note 52.

that a customer faces on a house-by-house and business-by-business basis.¹⁰

Currently, Form 477 does not illuminate important broadband indicators such as the number of subscribers in a particular area, the customer classes of those subscribers, the speeds at which broadband services are offered and actually provided, and the broadband prices that are being offered and paid. California also notes that, even if Form 477 is modified to collect such data, current reliance on Zip Codes as the most granular geographic unit of analysis unnecessarily increases the difficulty of pairing such data with the publicly available and valuable demographic data offered by the U.S. Census Bureau.

As a general matter, California encourages the Commission to adopt, to the extent possible, standardized requirements for providers of broadband services across different platforms. With the proliferation of new ways to provide broadband services to an eager public, a development that California enthusiastically supports, complications will naturally arise regarding both the reporting and analyzing of data. Determining how to best collect such data is clearly an on-going process. To the extent possible, reporting requirements should be technology neutral. More importantly, broadband

¹⁰ *NPRM* at para. 10.

availability and subscriber data for all companies should be provided in the same format.

A. More Granular Data About Broadband Penetration and Availability

It is essential that the FCC take this opportunity to collect more specific broadband data, and that that be accurately assigned to granular geographic units. For example, the FCC seeks “comment on whether [it] should require all broadband providers to report the number of residential customers served ... and also the number of homes “passed” by their broadband-enabled infrastructure.¹¹ This is basic information that all broadband providers should be able to report to the FCC. California recommends that companies separately report residential and business subscriber data for each question on Form 477.

B. Data Reporting Should Be By Census Block Groups (CBGs)

The Commission has suggested that carriers report subscribers by 9-digit Zip Code rather than the current 5-digit Zip Code.¹² While this would provide more granular data, it would not be a significant step towards facilitating granular analysis. California recommends that the Commission collect all Form 477 data by Census Block Group (CBG) rather than the

¹¹ *NPRM* at para. 28.

¹² *See NPRM* at paras. 10, 27, 29, and 31.

Zip+4 proposed by the FCC in the *NPRM*. Rather than attempting to use demographic data that may have been developed from various public and/or commercial sources, California recommends using the publicly available information developed by the Census Bureau. A source of data that is standardized nationwide, and that is regularly updated, allows consistent comparisons within and across states. Unfortunately, the Census Bureau does not provide demographic data at the 9-digit Zip Code level, nor does it provide cartographic boundary files for 9-digit Zip Codes.¹³

Using CBGs rather than Zip Codes would also eliminate costs that the FCC itself incurs in correlating Zip-Code-based Form 477 data with demographic data.¹⁴ Recent Congressional testimony highlights the advantages of using CBG level reporting instead of ZIP+4.¹⁵

California itself will collect broadband data from holders of state-issued video franchises by census tract and census block group. In 2006, the

¹³ According to the USPS.GOV, “The ZIP Code system was created and designed to provide an efficient postal distribution and delivery network... [Therefore], delivery growth and changing demographics can necessitate adjustments to ZIP Code boundaries in order to achieve United States Postal Service objectives.”

¹⁴ NPRM at para. 29.

¹⁵ George Ford, Chief Economist of the Phoenix Center for Advanced Legal and Economic Public Policy Studies, oral testimony on Draft H.R. bill, “Broadband Census of America Act of 2007,” at a hearing held on May 17, 2007 before the House Committee on Commerce and Energy, Subcommittee on Telecommunications and the Internet. “[C]ollect[ing] and disseminat[ing] information on ZIP+4 code areas ... is severely limiting for the empirical analysis of broadband and broadband policy.” *Id.* at 8.

California Legislature passed the Digital Infrastructure and Video Competition Act, establishing a process for the issuance of video franchises by the CPUC. In adopting DIVCA, the Legislature found that increased cable and video competition would speed the deployment of broadband technologies, and complement the state's interest in increasing investment in broadband infrastructure and closing the digital divide.¹⁶ The Legislature included requirements for holders of state video franchises to report broadband availability and subscription information annually to the CPUC, and required such information to be provided on a census tract basis.¹⁷

In its Rulemaking to implement DIVCA, the CPUC explored both the practicalities and importance of how to implement this provision. It agreed with certain commenters, concluding the following:

...the “absence of sufficient data” may be the chief limitation on the government’s ability to address the Digital Divide in a meaningful and targeted way. [footnote omitted] With sufficient data, California has the information it needs to address broadband access gaps (by technology type) and depressed usage rates. For example, the Commission could map areas where broadband access is unavailable and use these maps to craft incentives to encourage competitive entry into unserved markets.

The value of broadband and video data is enhanced when correlated with U.S. Census demographic

¹⁶ Cal. PU Code Sec. 5810.

¹⁷ Cal. PU Code Sec. 5960.

information (reported by census tract). Then, we will know where broadband is offered, and what regions, or populations, are most likely to take advantage of the technology.¹⁸

The CPUC acknowledged that for some companies it might be difficult for state franchise holders to report information on households that the companies merely pass, rather than serve, and provided for reporting such information by alternate geospatial areas, if necessary.¹⁹ With regard to subscriber information, it found there would be no difficulty with reporting by census tract:

...communications companies maintain billing databases that include subscriber addresses, and any company may “purchase or develop the systems to correlate the holder’s customer street address data to add the ability to comply with the census tract requirement.” [footnote omitted] Moreover, a communications company collecting CHCF-B funds likely already has such systems in place. [footnote omitted] We, therefore, require subscribership data to be based upon customers’ individual addresses. These addresses shall be geocoded to specific, corresponding census tracts or other census units that nest within census tracts.²⁰

¹⁸ D.07-03-014, Decision Adopting a General Order and Procedures to Implement the Digital Infrastructure and Video Competition Act of 2006 (in R.06-10-005, Rulemaking for Adoption of a General Order and Procedures to Implement the Digital Infrastructure and Video Competition Act of 2006) (March 1, 2007), *mimeo*, at 142.

¹⁹ D.07-03-014 at 143 and Appendix D.

²⁰ D.07-03-014 at 143.

To date, three entities have applied for state video franchises, and each was able to define its service footprint using CBGs. The number of households and low income households in the pertinent CBGs were reported by each. The first franchisee has now submitted broadband subscribership data by census tract. These data will be due from the other two franchisees shortly. Those interested in holding a state video franchise in California will comply with these requirements. Given the benefits of collecting data with this granularity, we urge the FCC to adopt CBGs as the geographic reporting unit for Form 477.

C. Simultaneous State Filing of Form 477

California recommends that those entities filing Form 477 simultaneously file Form 477 with state commissions.²¹ Doing so would offer benefits to both the FCC and state commissions. It would reduce the delay in the transmittal of Form 477 data from the FCC to the subscribing states and allow state commissions to produce timely assessments of broadband and voice communications subscribership rates. California currently waits 5-6 months after the Form 477 is filed with the FCC to receive Form 477 data. This change would also reduce the burden on the FCC to prepare and provide the Form 477 data for the individual subscribing states. The FCC already

²¹ Such service would be made pursuant to 47 C.F.R. § 1.47.

provides this data to states in its original format, under agreements of non-disclosure, simultaneous reporting should not impose significant cost or burden to providers, and the same confidentiality requirements should be required.

III. CONCLUSION

By commenting on this *NPRM*, the CPUC hopes to move the state and the country closer to ubiquitous broadband access by developing a more accurate understanding of where we stand in our own broadband availability, and how our nation's broadband availability compares to other similarly-situated modern economies. It is with these bandwidth intensive economies that California and the U.S. must compete in international markets.

By providing the recommendations outlined herein, we aim to reduce the complexity associated with analyzing Form 477 data, and simultaneously to increase its precision. If adopted, these changes would enhance the efforts of all policymakers toward achieving ubiquitous broadband throughout the nation.

Respectfully submitted,

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